

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### REGION VII 901 NORTH 5TH STREET KANSAS CITY, KANSAS 66101

# 08 DEC 2003

# CERTIFIED MAIL RETURN RECEIPT REQUESTED

James Haines President and CEO Westar Energy, Inc. 818 South Kansas Avenue Topeka, Kansas 66612

RE:

Supplemental Request for Information Pursuant to Section 114(a) of the Clean Air Act Regarding EPA's Coal-fired Power Plant Investigations

Dear Mr. Haines:

The United States Environmental Protection Agency (EPA) hereby requires Westar Energy to provide certain additional information as part of an EPA investigation to determine the Clean Air Act (CAA or the Act) compliance status of the Jeffrey and Lawrence Energy Centers. This request supplements earlier Information Requests dated December 4, 2002, and April 10, 2003.

This supplemental request is made pursuant to Section 114(a) of the CAA, 42 U.S.C. § 7414(a). Under Section 114(a) of the CAA, 42 U.S.C. 7414(a), the Administrator of EPA is authorized to require any person who owns and/or operates an emission source to establish and maintain records, make reports and provide such other information as he may reasonably require for the purposes of determining whether such person is in violation of any provision of the Act.

You are required to respond to the questions 1. - 14. for Units 1-3 at the Jeffrey Energy Center and for Unit 5 at the Lawrence Energy Center for the period January, 1980, to the present and for each calendar year and/or other time period specified for the projects listed in Enclosure 2.

- 1. Provide the following for each project and/or its associated Work Order(s) and/or Work Request(s) listed in Enclosure 2:
  - a. all documents, not already provided pursuant to the information requests dated December 4, 2002 and April 10, 2003, including but not limited to engineering analyses and other studies, describing the nature, extent, cost and frequency of each project, including those related to life extension, capacity increase, efficiency enhancements or reliability improvements;
  - b. project justifications;
  - c. cost/benefit analyses;
  - d. all alternative options analyses;



- e. authorized expenditure;
- f. total project cost, including Westar's costs and all costs shared by other owners and operators of the affected units;
- g. date of approval;
- h. project completion date;
- i. return to commercial operation date;
- j. all proposals, requests for proposals and price quotations submitted by equipment suppliers or contractors;
- k. copies of all documents between Westar (or its predecessors) and its contractors, consultants and in-house engineering personnel discussing changes in material types in or design of the existing component(s) being replaced;
- 1. any engineering or performance tests, or related documents showing original as-built performance, and performance for the period immediately prior to and immediately following completion of each project;
- m. any pre or post-project equipment guarantee evaluation that was conducted for each project and correspondence with equipment vendors regarding performance, and;
- n. all Work Order and/or Work Request project completion reports.
- 2. Provide copies of the boiler cross-sectional diagrams immediately prior to (or original as-built if unmodified from original) and immediately following completion of all projects listed in Enclosure
- 3. For each of the boiler and turbine operating factors listed below, provide values for the operating factors for the (i) original, as built operation, (ii) current operation, (iii) operation immediately prior to and (iv) operation immediately following the project for each project listed in Enclosure 2. Include all documentation and correspondence, including but not limited to engineering calculations and contract specifications, used in selecting the values and/or as otherwise specified below.
  - a. Steam flow rate, steam temperature and pressure
    - 1. Maximum hourly
    - 2. Sustained
  - b. Maximum hourly heat input capacity and an explanation of the assumptions made to determine this maximum heat capacity to include, but not limited to, the coal heat content in BTU/lb and the maximum hourly coal feed rate in lbs/hr;

- c. Gross hourly megawatt (MW) capacity;
- d. Net hourly MW capacity;
- e. Net heat rate in BTU/KWHR, and;
- f. Emissions, stated in terms of lbs/mmBTU and lbs/hr for pollutants NOx, SO2, CO, PM, PM10 and Air Toxics (Pb/Hg/HCl/Other) for conditions (i)-(iv) above for each project listed in Enclosure 2.

#### 4. Performance tests

- a. Provide the day and hour of each capacity test as defined in the MOKAN Uniform Rating of Generating Equipment 3.0 current guidance for testing;
- b. Provide the standard operating procedure, or equivalent document, for the performance of the capacity tests. This would include the procedures, specifications, conditions, and other parameters under which the representativeness and accuracy of the tests are determined;
- c. Provide all results of capacity tests including the condition (e.g. valve wide open), steam flow and coal used;
- d. Provide a.-c. above for any other capacity tests not otherwise provided above and irrespective of whether required by rule or conducted for any other purpose including short tests, and;
- e. Describe equipment limitations or other limiting factors that restrict capacity.
- 5. Provide summary results of all complete or partial stack tests performed for the following pollutants. You may exclude the summary result for any SO2 and NOx performance tests used to certify or quality assure the acid rain CEMS after 1995.
  - a. NOx,
  - b. SO2
  - c. CO,
  - d. PM and PM10,
  - e. Air Toxics (Pb/Hg/HC1/Other).
- 6. Provide monthly and annual emissions, stated in terms of lb/mmBTU and tons/year, of the following air pollutants. Emissions information responsive to this request should include monthly and annual summaries of all data obtained from any continuous emission monitor (CEM) installed in the flue gas stream before relying on annual emission reports such as Emission Inventory Questionnaires submitted to the applicable state regulatory agency. Acid Rain CEM data that has been submitted to the EPA to comply with Title IV requirements does not have to be resubmitted to satisfy this Section 114 information request:

- a. NOx,
- b. SO2,
- c. CO.
- d. PM and PM10,
- e. Air Toxics (Pb/Hg/HC1/Other).
- 7. Provide monthly and annual scrubber performance data measured as "% SO2 reduction", average lb/hr reagent used, and the corresponding number of MWHR during each period scrubbing occurred. Provide design maximum scrubber efficiency.
- 8. Provide copies of all permit applications and permits received under the New Source Review requirements, including but not limited to Prevention of Significant Deterioration (PSD) permit applications submitted to the state regulatory agency, and all subsequent correspondence with the state regulatory agency regarding the permit applications.
- 9. Provide (a) all insurance related evaluations, performance tests, inspections, and filings or reports (e.g. Form R1) related to boiler pressure components, including procedures, dates, times, durations and results of each as applicable, and (b) all correspondence between Westar or its predecessors and any state or federal boards or agencies as a result of (a).
- 10. Provide copies of all documents including but not limited to simulation modeling, rate case documentation, fuel purchase planning and new unit investment planning, that provide estimates of coal use, load or growth projections for the period January 1, 1980, to 2007.
- 11. Provide the total capital and maintenance expenditures and retirements on an annual basis made to each Steam Generating Unit over the life of each unit.
- 12. Provide detailed continuing property records showing capital additions and retirements for each unit of property such as pulverizers, superheaters, economizers, and other equipment identified in Enclosure 2 consistent with FERC Property Record Accounts 311, 312, 314 and 316. If you believe that your accounting practices are inconsistent with FERC accounting methods, provide appropriate information with adequate explanations.
- 13. For Calendar Year 2002 and Calendar Year 2003, provide the following for each requested Coal Fired Boiler Unit. If certain information in not available, identify what information is not available on a factor by factor basis.
  - a. Capacity factor on a monthly and annual basis;
  - b. Availability factor on a monthly and annual basis;
  - c. Operating hours on a monthly and annual basis;
  - d. Coal consumption on a monthly and annual basis;
  - e. Fuel quality (e.g., % sulfur, % ash, heat content, etc.) on a monthly and annual basis;

- f. Total gross and net generation (MWHR) on a monthly and annual basis;
- g. Heat rate (BTU/KWHR) on a monthly and annual basis;
- h. Identify the top ten annual causes of forced outages and deratings by MWHR of lost generation;
- i. Lost generation during planned outages;
- j. GADS information in hardcopy and electronic ASCII or spreadsheet format. This information should include by unit:
  - i. lost generation (in MWHR)
  - ii. duration of all outages and deratings
  - iii. maximum Net Dependable Capacity at the time of the outage or derate
  - iv. start date and time of outage
  - v. stop date and time of outage
  - vi. cause code as used by NERC
  - vii. event type
  - viii. event number

If the above GADS information is not available in ASCII or spreadsheet format, you may submit your original GADS submission to satisfy j.

- k. Scheduled/planned boiler unit retirement dates, and;
- 1. Peak hourly average generation (MW) for each month.
- 14. Provide copies of all FERC Form 1/Schedule 107, Construction Projects, identifying construction projects, for each unit from 1980 to the present. If similar information is available for any years during which the information was not reported to FERC, but instead was provided to any other state or federal agency, or generated internally for Westar's purpose, submission of these reports will suffice. If no report was reported to any state of federal agency and not otherwise created for Westar's purpose, so identify.
- 15. Provide quarterly excessive emission reports for opacity as required by K.A.R. 28-19-19(c)(1) and (k) for Lawrence Unit 3, Unit 4, and Unit 5 for the period from the effective date of K.A.R. 28-19-19(c)(1) and (k) to the present excluding the reports for the period 1995 to the present for Lawrence Unit 3. The above reports can be provided in hard copy or electronic format.

You must submit the response to this information request within thirty (30) calendar days after your receipt of this letter. This information should be submitted to:

U.S. Environmental Protection Agency, Region 7 Air Permitting and Compliance Branch (ARTD/APCO) 901 North 5<sup>th</sup> Street Kansas City, Kansas 66101 Attention: Jon Knodel

If you anticipate being unable to respond fully to this request within the time period specified, you must submit a sworn declaration by a responsible corporate official within 20 calendar days after your receipt of this letter, specifying what information will be provided within the time specified, describing what efforts have been/are being made to obtain other responsive information and providing a detailed schedule of when such other responsive information can be provided. Upon receipt and based upon such declaration, EPA may extend the time in which responsive information must be provided.

Your response to this requested information must be certified by a duly authorized officer or agent of Westar Energy by signing the enclosed <u>Statement of Certification</u> (see Enclosure 3) and returning it with your response. All information submitted in response to this request must be certified as true, correct, accurate, and complete by an individual with sufficient knowledge and authority to make such representations on behalf of Westar Energy.

A knowing submittal of false information in response to this request may be actionable under Section 113(c)(2) of the CAA, as well as 18 U.S.C. §§ 1001 and 1341. Westar Energy should also be aware that a failure to comply fully with the terms of this request may subject it to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

This letter in no way affects the obligations of Westar Energy to comply with other local, State and Federal laws and regulations. In addition, nothing in this letter shall be construed to be a waiver by EPA of any rights or remedies under the Clean Air Act.

The information requested herein must be provided notwithstanding its possible characterization as confidential information or trade secrets. Westar Energy may assert a confidentiality claim covering part or all of the information requested, pursuant to 40 C.F.R. §2.203(b) by attaching to such information at the time it is submitted, a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as "trade secret," "proprietary," or "company confidential." Information covered by such a claim will be disclosed by the EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when it is received by the EPA, it may be made available to the public without further notice to you. You should review the above cited regulations carefully before asserting a business confidentiality claim as certain categories of information are not properly the subject of such a claim.

The requirements of this letter are not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. § 3501 et seq.

If you have any questions concerning this matter, please contact Jon Knodel at (913) 551-7622 or Mike Bronoski at (913) 551-7291.

Sincerely,

William A. Spratlin

Director

Air, RCRA, and Toxics Division

William (Spratt

Enclosures:

Instructions and Definitions

Project List

Statement of Certification

cc:

Douglas R. Sterbenz, Westar Energy, Inc.

Bill Eastman, Westar Energy, Inc.

David Tripp, Esq., Stinson Morrison Heckler LLP

Vick Cooper, Kansas Department of Health and Environment Loren Denton, United States Environmental Protection Agency

#### **ENCLOSURE 1**

#### INSTRUCTIONS

- 1. Provide a separate narrative response to each question and subpart of a question set forth in the Information Request.
- 2. Precede each answer with the number of the question to which it corresponds and at the end of each answer identify the person(s) that provided information that was used or considered in responding to that question, as well as each person that was consulted in the preparation of that response.
- 3. Indicate on each document produced in response to this Information Request, or in some other reasonable manner, the number of the question to which it corresponds.
- 4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
- 5. Where documents or information necessary for a response are neither in your possession nor available to you, indicate in your response why such documents or information is not available or in your possession and identify any source that either possesses or is likely to possess such information.

#### DEFINITIONS

All terms used in this Request for Information will have their ordinary meaning unless such terms are defined in the Act, 42 U.S.C. § 7401, C.F.R. Part 52 (which incorporates the federally-approved Stated Implementation Plan), or other Clean Air Act implementing regulations. Reference is made to the EPA regulatory provisions only; however, you should apply the applicable federally-approved state provisions when appropriate. Definitional clarification is specified below.

- 1. The terms "document" and "documents" shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a from useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any document.
- 2. The terms "immediately prior to" and "immediately following" shall mean conditions representative of operation during the period 6 months before and 6 months after the project.
- 3. The term "Steam Generating Unit" shall have the same meaning as defined at 40 C.F.R. 60.41(b)
- 4. The term "Coal-Fired Boiler Unit" shall mean all equipment used for the purpose of generating electricity including but not limited to coal handling facilities, boilers, ductwork, stacks, turbines, generators, and all ancillary equipment.

- 5. The term "PSD/NSR" shall mean the Prevention of Significant Deterioration and the New Source Review preconstruction permitting programs established at 40 C.F.R. 51 and 52 and any respective program established under a state implementation plan.
- 6. The term "MWHR" shall mean megawatt hours of electrical energy.
- 7. The term "KWHR" shall mean kilowatt hours of electrical energy.
- 8. The term "BTU" shall mean the British Thermal Unit of heat.

#### **ENCLOSURE 2**

#### JEC#1

1985, Turbine-Purchase and install modified compensators, approved 07/08/85

1985, Turbine-Purchase materials and contract labor necessary to modify H.P. Turbines; the modification consists of replacing 8 rows of failure prone riveted shroud blading with integral shrouded blading, approved 07/08/85

1990, WO 9954: Install concentric firing system II (CFS II) on Unit 1 boiler, Est. Comp. Date 10/90

1992, WO 6525: Replace Unit #1 front reheater pendents, Completed 06/24/92

1995, WR A01848: Replace superheater tubes in Unit 1, Completed 12/15/95

1999, WR A05872: Upgrade Unit 1 economizer, Completed 03/29/99

2003, Horizontal superheater, in document Budgeted Construction Projects for 2003

#### JEC#2

1987, Rebuild scrubber, Approved 09/11/87

1988, WO 5660: Purchase and install C-E Concentric Firing System for Unit 2, Est. Comp. Date 06/88

1992, Turbine-Upgrade the steam turbines, Approved 01/31/92

1994, WO 1837: Replace front reheater pendents in Unit 2, Completed 05/25/94

1994, WO 3357: Replace lower portion of final superheater pendents in Unit 2, Completed 05/25/94

1999, Upgrade Unit 2 Boiler economizer, Completed 04/27/99

2000, Electrostatic precipitator-Rebuild of precipitators, Approved 10/18/00

2000, Turbine-Upgrade all eight J2 LP inlet compensators, Approved 03/20/00

2001, WR A08090: Install horizontal superheater in Unit 2 boiler, Authorized 03/28/01

2001, Install 3rd economizer bank in JEC2, Approved 03/20/01

2003, Replace front reheater pendants in J2, Approved 06/17/03

#### JEC #3

1989, WO 9934: Install Concentric Firing System II (CFSII) on Unit 3 boiler, Est. Completion Date 12/8

1993, Turbine-Installation of turbine upgrade J3 (labor and material required to install J3 turbine upgrade purchased under separate work order), Approved 10/12/93

1997, Unit 3 reheater tubes

1997, WR A04002: Replace superheater tubes in Unit 3, Completed 05/28/97

2000, WR A07928: Replace upper arch slope tubes, Acct. Dept. Approval 11/21/00

2000, Replace U3 boiler tubing, planned for 2000, in 2000-2019 Long Range Plan

2002, WR A08585: Horizontal superheater, Accounting department approval 01/29/02

#### LEC 5

1980, Turbine-Purchase and install 2 rows 16" L-1 turbine blades on LP rotor on Lawrence 5 500 MW Westinghouse steam turbine SN LP 13A-3366, Approved 04/18/80

1980, WO 7579: Improvements to Unit 5 scrubber, Accounting Department Approval 01/08/80

1985, WO 6681: Purchase high pressure feedwater heaters, Approved 05/01/85

1985, Turbine-Purchase L5 turbine parts, Approved 03/04/85

1987, WO 2164: Modify existing scrubber crystallizer tank work on Unit 5, including removal of all suction screen, and associated washers and side tank mixers. Contract modification dated 06/12/87

1987, WO 2167: Purchase and install fiberglass scrubber outlet duct Lawrence #5, Work Order Completion Report dated 06/30/87

1989, WO 8052: Purchase and install L5 fans, rotors and housings, Est. Comp. Date 04/898

1990, WO 1842: Purchase and installation of feedwater heaters 4 & 5 of Unit 5, Est. Comp Date 05/90

1991, WO 7385: Replace L5 air preheater, repair rotors, and replace sootblowers, Approved 09/03/91

1991, Turbine-Replace the low pressure steam turbine, Approved 12/06/91

1993, Turbine-purchase and install replacement stationary blading for rows 1 thru 8 in the high pressure section and row 10 in the intermediate section on the IEC #5 turbine, Approved 04/14/93

1993, WO 2367: Replace L5 fiberglass scrubber piping, Est. Completion Date 06/01/93

1993, Replace waterwall tubing L5, planned for 1993, in 1991-2010 Long Term Operating Plan

1993, Replace superheater L5, planned for 1993, in 1991-2010 Long Term Operating Plan

1997, Turbine-Purchase and install new Unit 5 turbine extension shaft, Est. Completion Date 08/21/97

1998, Turbine-Stationary and rotating blades, Approved 01/14/98

1999, WR A06309: Purchase and install booster feed pumps on Unit 5, In service date 12/31/99

1999, WR A06432: Replace SO2 scrubber chevron vanes, Acct. Dept. Approval 02/24/99

1999, Replace waterwall tubing L5, planned for 1999, in 1991-2010 Long Term Operating Plan

1999, Partial replacement superheater L5, planned for 1999, in 1991-2010 Long Term Operating Plan

2000, WR A07472: Replace front reheater on Unit 5, Approved 05/28/00

2000, WR A07075: Replace economizer on Unit 5, Est. Completion Date 05/31/00

2001, WR A07472: Replace front heater on Unit 5, Completed 05/30/01

2005, Partial replacement superheater L5, planned for 2005, in Long Term Operating Plan

2005, Partial replacement reheater L5, planned for 2005, in Long Term Operating Plan

## **ENCLOSURE 3**

# STATEMENT OF CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

 (Signature)	
(Title)	
 (Date)	NAMES (AND ASSOCIATED

# Certificate of Service

The undersigned hereby certifies that a true and correct copy of the foregoing Clean Air Act Section 114 Request for Information was mailed by certified mail, return receipt requested, to:

James Haines President and CEO Westar Energy, Inc. 818 South Kansas Avenue Topeka, Kansas 66612

Certified Return Receipt No. 7002 0860 0006 5959 5385

Kimberly & Sirich

Office Manager, Air Permitting and Compliance Branch

12-8-03

Date